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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary		Examiner		Art Unit		
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A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status				•		
2a) ☐ 3) ☐ Dispositi 4) ☒ 5) ☐ 6) ☒ 7) ☐ 8) ☐ Applicati	Responsive to communication(s) file This action is FINAL. Since this application is in condition closed in accordance with the pract on of Claims  Claim(s) 1-34 is/are pending in the a 4a) Of the above claim(s) is/a Claim(s) is/are allowed. Claim(s) 1-34 is/are rejected. Claim(s) is/are objected to. Claim(s) is/are objected to. Claim(s) are subject to restriction on Papers  The specification is objected to by the	2b)  This action is nonfor allowance except for ice under Ex parte Quay/application.  are withdrawn from consideration and/or election required.	formal matters, pros e, 1935 C.D. 11, 45 deration			
10) ☐ The drawing(s) filed on 14 June 2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
2) Notice 3) Information	t(s) te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (Imation Disclosure Statement(s) (PTO/SB/08) tr No(s)/Mail Date 07/07, 06/05.	5)	Interview Summary ( Paper No(s)/Mail Dat  Notice of Informal Pa  Other:	te		

### **DETAILED ACTION**

### Oath/Declaration

1. It is noted that in the Declaration, on page 1, neither of the boxes is checked and it is indicated one should be, i.e. the second one should be checked.

## Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

For Example:

### **Drawings**

2. The drawings are objected to because Figures 30A-B should be labeled as "Prior Art". Also, descriptive text, e.g. "DISCHARGED LIQUID", should be avoided in the Figures.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the invention as claimed in claims 23-24, and 26-29, i.e. the surface sheet, guide sheet and skin-contact sheet located as claimed, see also discussion infra in paragraph 6, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### Description

- 4. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: page 2, first full paragraph, last sentence thereof, page 19, line 17, page 32, lines 15 and 21, page 33, line 5, page 35, lines 4 and 6, and page 41, first and second full paragraphs.
- 5. The abstract of the disclosure is objected to because terminology which can be inferred, i.e. "The present invention...to provide" on line 1 and "The above-...by" on lines 6-7, should be avoided. Correction is required. See MPEP § 608.01(b).
- 6. The disclosure is objected to because of the following informalities: The description is replete with informalities. For example: 1) Reference to the inventors should be avoided, i.e. the description is that of the invention, not the inventors, see, e.g., the first full paragraph of page 3.

  2) The subtitle "Disclosure of the Invention" should be --Summary of the Invention-- instead. Furthermore, such section, i.e. a description of the invention of the claims, and the claims as preliminarily amended are not commensurate, e.g. where is the invention of page 4, line 14 set forth in the claims?

  3) Each Figure, e.g. Figures 1A, 1B, 2A and 2B, should be described on pages 11-15.

  4) The section subtitle "Best Mode for Carrying Out the Invention" should be -- Detailed Description of the Invention--. 5) In the amended paragraph at page 4, line 1, the last

line appears to be inaccurate, i.e. should "absorber" be --absorbent product--? 6) The description of the invention throughout the application is unclear/inconsistent. On page 19, lines 11-14 the surface sheet 10 is described as "liquid impermeable" and "liquid-impermeable" as being the property of not in effect allowing liquid to permeate. Claim 1 also requires such a "liquid impermeable" surface sheet. Yet, e.g., in claim 7 and on page 26, last two full paragraphs and Figures 7F and G the surface sheet is described as having a "liquid permeable" portion and "liquid permeable" being a characteristic of in effect allowing liquid to permeate. How can the surface sheet which is "liquid impermeable" as defined also be "liquid permeable" as defined? A clear consistent description throughout the application should be set forth. 7) Is "Air Laid" on page 39 a trademark? Note paragraph 7. 8) The description of the various sheets in claims 23-24 and 26-29 and the units or absorbers in claims 25 and 29 and, e.g., page 45, first full paragraph, Figures 15A-B, 18A-18C, page 48, line 3-page 52, line 3 of the application are also unclear/inconsistent. Figure 15B shows a guide sheet but does not show such between the main body and housing as claimed but rather the guide sheet between the absorber unit and the back sheet lining the inner wall of the housing unit. Does the terminology "laminated plural number" with regard to the unit or absorbers as claimed in claims 25 and 29 require the layers of the each unit or absorber be laminated, see page 48, line 13-14 and page 49, lines 8-9, or the units and absorbers be laminated to each other, see page 48, lines 21-23 and 49, second full paragraph, or both? A clear consistent description throughout the application should be set forth. 9) The description of the back flow preventing sheet in claim 31 and on pages 57-59 is unclear/inconsistent also. Is the sheet impermeable or permeable? If the latter how does it prevent back flow? A clear, consistent description should be set forth. The entire description

should be carefully reviewed and revised, as necessary. Applicant is thanked in advance for his/her cooperation in placing the description in proper form.

Appropriate correction is required.

7. The use of the trademark NovaThin, KINOCLOTH, MegaThin, page 40, Gore-tex, page 47, the trademarks in the examples, has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Trademarks should be shown in all capital letters or with a trademark symbol not both or with other terminology.

## Claim Objections

8. Claims 1-34 are objected to because of the following informalities: The claims are replete with improper claim syntax. For example: In claim 1, line 2, "the", both, should be --an--and --a--, respectively. In claim 2, lines 2-3, ";...and" should be --: on both front and back ends, on both right and left ends, and/or--. In claim 11, line 2, and claims 24, line 2, "contact" should be --contactable--. In claims 18-20, before "super" (each), --the-- should be inserted. In claim 19, last line, after "polymer", --is-- should be inserted. In claim 21, "50wt%" should be --50 wt%--. In claim 22, line 3, should "wherein" be --further comprising--? In claim 22, line 3, delete "-", on line 4 after ";", insert --and--, on line 5 before "housing", insert --a--, on line 6, change "and containing" to --wherein the housing contains-- and on line 8, change "being

received removably" to -- is removably received-- and delete "are provided". Claims 25 and 29 appear to be missing a word or words. With regard to claim 26, see discussion of claim 22. In claim 30, line 2 (both) and line 3, second, "the" should be --a--. In claims 32-34, the dimensions should be spaced from the numbers they follow, see discussion of claim 21 supra. The claims should be carefully reviewed and revised, as necessary. Applicant is thanked in advance for his/her cooperation in placing the claims in proper form. Appropriate correction is required.

# Claim Rejections - 35 USC § 112

9. Claims 1-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As discussed supra, it is unclear what the permeability of the surface sheet is, i.e. "liquid impermeable" as set forth in claim 1, see page 19, lines 12-14 of the instant application, i.e. entirely impermeable, or only partially impermeable, i.e. "liquid permeable" too, as set forth in claim 7, see page 27 lines 5-7 of the instant specification. A clear consistent description should be set forth. Also, a positive antecedent basis for "the back sheet of the absorber" on the last line of claim 1 should be set forth. In claims 11, 23 and 27-28, a positive structural antecedent basis for "the guide sheet" should be set forth. In claim 22, it is unclear what structure is being claimed on lines 2 et seq, e.g. is the main body and/or housing being claimed as part of the product of claim 1 or only the capability of the product of claim 1 being removably received thereby, i.e. what structure is required at a minimum? Is the housing separate from the main body? The same as the portion of the main body which defines the internal space? This lack of

clarity is exacerbated in claims 23-25, e.g. due to the lack of antecedent basis for a guide sheet in claim 23, see discussion supra, due to the claiming of the inclusion of a particular sheet between such main body and housing, due to the unclear claim terminology "laminated plural number", see discussion in paragraph 6, section 8) supra, and due to the inconsistent claiming of a laminated plural number of absorber units being included in the housing for the absorber unit. This lack of clarity also applies to the similar language of claims 26-29. In claim 30, the description of the sheet as being liquid permeable is appears to be inconsistent with the description of it being "back-flow preventing, see discussion supra in paragraph 6, section 9).

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## Claim Language Interpretation

10. Due to the lack of clarity discussed supra with regard to the terminology "liquid impermeable" and "liquid permeable, the terminology "liquid impermeable" will be interpreted to require a surface sheet having at least a portion which is "liquid impermeable" as set forth on page 19, lines 12-14. Also, due to the lack of antecedent basis the side on the last line of claim 1 will be interpreted as some side of the back sheet. It is noted, regardless of such interpretations, that the last two lines of claim 1 do not require movement of liquid directly to a side of the back sheet and/or such side be the side adjacent the lower side of the absorber, i.e. does not preclude movement through the absorber. In claim 20, the terminology "means" on line 3 is interpreted not to invoke 35 USC 112, sixth paragraph. Claim 20 is also a product by process claim, see MPEP 2113, i.e. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process

claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966." The end product of claim 20 is considered to be a liquid-permeable nonwoven fabric with a coat of super absorbent polymer. "Coat" is defined by the dictionary as "a layer of one substance covering another" (emphasis added). Due to the lack of clarity set forth supra, claim 22 is interpreted to require at least an absorbent product as claimed in claim 1 having the capability of being removably received on an inner surface of a main body which can form an internal space to contain a region of the wearer. Claim 23 is interpreted to further require such product include a guide sheet. Claim 24 is interpreted to require such product include a skin contact sheet. Claim 25 is interpreted to require at least one such product having at least some portion thereof which is a laminate, i.e. layers which are bonded or united together. Due to the lack of clarity set forth supra, claim 26 is interpreted to require at least an absorbent product as claimed in claim 1 having the capability of being removably received on an inner surface of a main body which can form an internal space to contain a region of the wearer. Claim 27 is interpreted to further require such product include a guide sheet on the upper side of the surface sheet. Claim 28 is interpreted to require such product include a skin contact sheet on the upper side of the surface sheet or a guide sheet. Claim 29 is interpreted to require at least one such product having at least one absorber in which some portion thereof is a laminate, i.e. layers which are bonded or united together. Due to the lack of clarity discussed supra with regard to claim 30, a sheet which prevents flow is interpreted as being required regardless of whether it is permeable or impermeable.

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## Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 12. Claims 1-15 and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Dobrin et al '698.

Claim 1: See the Claim Language Interpretation section supra and '698 at Figures, esp. Figures 3-4, the paragraph bridging cols. 2-3, col. 4, first full paragraph, col. 4, lines 41-59, col. 5, first full paragraph (and thereby, by incorporation, '678 at the abstract, '402 at the paragraph bridging cols. 7-8 and col. 10, lines 17-28, '423 at col. 13, lines 9-13 (and thereby, by incorporation, '068 at the Figures and col. 5, lines 15-17 and col. 14, lines 7-9 (Note the terminology "layer" on line 8))), col. 6, lines 8-29 of '698 (and thereby, by incorporation, '246 at the Figures and col. 4, line 28-col. 12, last line) and '698 at col. 6, line 30-col. 10, line 334, i.e. '698 teaches an absorbent product 20 with a liquid-impermeable surface sheet positioned on the upper side, e.g., 24, see Claim Language Interpretation section supra and '698 at col. 5, lines 45-47 and col. 6, first full paragraph and thereby, '246 at the portions cited supra, i.e. a portion of the sheet between the aperture is liquid impermeable, a liquid-impermeable back sheet positioned on the lower side, 26 and/or 90, see paragraph bridging cols: 7-8 and col. 10, lines 10-34, and an absorber 28 containing super absorbent polymer, see col. 4, line 58, to absorb discharged liquid positioned between the surface sheet and the back sheet. Claim 1 further requires a flow passage being provided to allow a part or all of the discharged liquid supplied to

Interpretation section supra and '698 teaches open areas between the surface sheet and back sheet such that liquid directly or indirectly moves to some side of the back sheet as claimed, e.g. passages through the absorber between the sheets. See col. 7, lines 36-50 of '698. Note also page 1, last full sentence of the instant application also. See also discussion of claims 2, 8 and 10 infra.

Claim 2: The flow passage is provided in portions of <u>the absorber</u> including on both front and back ends, on both right and left ends, and in the center, i.e. see discussion of claim 1, i.e. the passages of absorbent core 28 are in all of these portions.

Claim 3: The surface sheet is composed of a single-layer synthetic resin film, see '698 at element 24, col. 5, lines 45-47 and col. 6, first full paragraph and the cited portions of '246 in the discussion of claim 1 supra and element 12 or 40 thereof.

Claim 4: The surface sheet is composed of a laminate of a synthetic resin film and a non-woven fabric provided on the upper side surface of the synthetic resin film, see discussion of claim 3 and '246 at the Figures, e.g. element 40 is the film and 12 is the non-woven fabric, and '246 at col. 4, lines 28-37. It is noted that the claim does not require the fabric be provided directly adjacent the upper side surface.

Claim 5: The synthetic resin film has concave and convex portions that constitute passage(s) for flow, see discussion of claims 1 and 4, e.g. element 40, supra.

Claim 6: The surface sheet is positioned in such a way that a portion of the surface of the upper side of the absorber is exposed, see Figures of '246, e.g. in Figure 5 core surface is "exposed" at 46. It is noted that it is not claimed what the absorber is "exposed" to.

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Claim 7: The surface sheet contains a liquid-permeable portion, see Claim Language Interpretation section supra and the discussion of claims 1 and 5-6 supra, e.g. the apertures in the topsheet of '698.

Claim 8: A liquid-permeable guide sheet with passages for flow is laminated to, see

Claim Language Interpretation section supra, at least a portion of the surface of the upper side of
the surface sheet, i.e. see discussion of claims 1 and 4 supra, e.g. guide sheet is 12 and/or 38
which is bonded or united, i.e. directly or indirectly, with surface sheet 40 which has passages for
flow. It is noted the claim does not require direct lamination.

Claim 9: The guide sheet covers at least a portion of the lateral sides of the absorber directly or over the surface sheet, see discussion of claim 8 and Figure 2 of '246 adjacent the lines from 24.

Claim 10: The guide sheet 12 has concave and convex portions, i.e. embossments, that constitute passage(s) for flow and has apertures in some of or in all of the convex portions, see discussion of claim 1 supra and '246 at col. 4, lines 37, 52-54 and 39-40, i.e. embossments are portions of the film which are raised, i.e. arched up/bulges outward, i.e. "convex", compared to other portions therebetween which are arched in/ bulges inward, i.e. "concave", in comparison thereto. It is noted that the claim does not set forth the reference points for the directional language concave and convex. Also note Figures 9C-E of the instant application.

Claim 11: A skin-contact sheet composed of liquid-permeable nonwoven fabric 12 is laminated, see Claim Language Interpretation section supra, to at least a portion of the surface of the upper side of either the surface sheet 40 or the guide sheet 38, see discussion of claims 1 and 8 supra.

Claim 12. The back sheet is composed of a synthetic resin film, see '698 at, e.g., col. 6, lines 35-37 and 41-45.

Claim 13: The synthetic resin film that constitutes the back sheet has air-permeability, see discussion of claim 12.

Claim 14: The back sheet is composed of a laminate of a synthetic resin film and a nonwoven fabric provided on the surface of the lower side of the synthetic resin film, see '698 at, e.g., col. 9, line 49-col. 10, line 34.

Claim 15: Both the synthetic resin film and the nonwoven fabric that constitute the back sheet have air-permeability, see discussion of claim 13 supra and '698 at col. 10, lines 9-34.

Claim 17: The synthetic resin film that constitutes the back sheet has concave and convex portions, e.g. apertured portions 80, see '698 at Figures 3-4, col. 7, lines 44-45, cols. 10, lines 28-31, col. 9, lines 26-30 and 43-44. The claim further requires such portions function as a liquid trap portion on the surface of the upper side of the backsheet. However, '698 teaches such claimed concave and convex portions on the upper surface of the backsheet. Therefore, there is sufficient factual evidence for one to conclude that such same structure would also inherently include the same function as claimed, i.e. a liquid trap function, see MPEP 2112.01.

Claim 18: The absorber is composed of a mixture of super absorbent polymer and fluffy pulp wrapped with a liquid-permeable core-wrapping sheet, see '698 at col. 4, lines 52, 56 and 58 and col. 5, lines 4-28 and thereby '402 at col. 6, lines 59-63 and col. 10, lines 13-17.

Claim 19: The absorber has two layers of liquid-permeable nonwoven fabrics and super absorbent polymer inserted in-between, see discussion of claim 18 as well as '423 at col. 13, lines 9-13 and '068 at the Figures and col. 14, lines 7-9.

Claim 20: The absorber is a liquid-permeable nonwoven fabric with a coat of super absorbent polymer, see Claim Language Interpretation section supra and the discussion of claim 19. It is noted that a continuous coating is not required.

Claim 21: The content of the super absorbent polymer in the absorber is 50 wt% or more, see discussion of claims 18-20 supra and '678 at the abstract.

# Claim Rejections - 35 USC § 103

- 13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 14. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dobrin '698.

Claim 32 requires the absorbent product have a re-wet amount of 5mL or less as measured according to a specific test and claim 33 requires such amount be 2mL or less. Claim 34 requires the absorber's absorbing capacity of sodium chloride solution of 0.9wt% be 300mL or more, when measured according to specific test, an average re-wet amount of 5mL or less, with a standard deviation of 3mL or less when measured according to a specific test and a mean absorption time of 30 seconds or less with a standard deviation of 2 seconds or less when measured according to a specific test. While '698 at col. 6, lines 8-24 and thereby '246 at the portions cited above, see discussion of claims 1-11 supra, and '698 at the sentence bridging cols. 4-5 teach strike through times, i.e. rates of absorption, and re-wet amounts, see, e.g. Tables 11-

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1V of '246, which are within the ranges as claimed, (note MPEP 2131.03 and 2144.05), and the absorption capacity be designed to be compatible with its intended use as well as the same structure and materials as discussed in claims 1-15 and 17-21 supra, '698 does not teach the specific absorbing capacity, average re-wet amount and standard deviation thereof, the mean absorption time and standard deviation thereof or the re-wet amount measured according to the claimed specific tests. However, since the general conditions are disclosed by the prior art, i.e. absorption capacity compatible with intended use, i.e. absorption over time of wear, low re-wet amounts without sacrificing strike through time, i.e. good absorption rate in combination with low rewet, it would not be inventive to discover the optimum or workable ranges, i.e. the claimed ranges of re-wet amount of 5mL or less as measured according to a specific test, more specifically 2mL or less, or the absorber's absorbing capacity of sodium chloride solution of 0.9wt% be 300mL or more, when measured according to specific test, an average re-wet amount of 5mL or less, with the standard deviation of 3mL or less when measured according to a specific test and the mean absorption time of 30 seconds or less, with the standard deviation of 2 seconds or less when measured according to a specific test, by routine experimentation if such are not already taught by '698, see In re Aller, 105 USPQ 233 (It is noted that it is well known or obvious that such properties are dependent on the specifics/type of materials used, i.e. a result effective variable).

15. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dobrin '698 in view of McCormack et al '163 and Bewick-Sonntag et al '521.

Claim 16 requires not only that the synthetic resin film that constitutes the back sheet have concave and convex portions with apertures in some of or in all of the convex portions, and

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the nonwoven fabric that constitutes the back sheet be water-resistant as taught by '698, see the discussion of claims 12-17 supra, but also the non-woven be a laminate of two layers or more, see Claim Language Interpretations section supra, including one layer or more than one layer of a spunbond nonwoven fabric and one layer or more than one layers of meltblown nonwoven fabric which '698 does not clearly teach at col. 10, lines 14-20. However, see '163 at Figure 2 and col. 6, line 64-col. 7, line 2, col. 7, lines 55-60 and col. 8, lines 49-54 and '521 at col. 5, line 52-col. 6, line 48, i.e. interchangeability of a laminate as claimed for a layer of non-woven in a film/nonwoven laminate constituting a backsheet. To make the nonwoven of '698 the claimed spunbond/meltblown laminate instead, if not already, would be obvious to one of ordinary skill in the art in view of the interchangeability as taught by '163 and '521.

16. Claims 1 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Romberg '544 in view of Dobrin '698.

Claim 1: See the Claim Language Interpretation section supra and '544 at Figure 1, col. 3, line 56-col. 4, line 31, i.e. '544 teaches an absorbent product 10 with a surface sheet positioned on the upper side, e.g., 18, a liquid-impermeable back sheet positioned on the lower side, 16, and an absorber 12 containing super absorbent polymer, see col. 3, line 67, to absorb discharged liquid positioned between the surface sheet and the back sheet. Claim 1 further requires a flow passage being provided to allow a part or all of the discharged liquid supplied to the surface sheet to move to a side of the back sheet of the absorber, see Claim Language Interpretation section supra and '544 teaches open areas between the surface sheet and back sheet such that liquid directly or indirectly moves to some side of the back sheet as claimed, e.g. passages through the absorber between the sheets. See col. 4, lines 57-63 of '544. Note also

page 1, last full sentence of the instant application also. Therefore, '544 teaches all the claimed structure except a surface sheet as best understood, see Claim Language Interpretation section supra, i.e. a sheet which has at least a portion which is "liquid impermeable" as set forth on page 19, lines 12-14. '544 teaches a sheet of nonwoven fibrous fabric. See, however, the portions of '698 cited supra, e.g. col. 5, lines 46-53, i.e. the interchangeability of apertured formed films for nonwoven fibrous fabric as a topsheet. To make the nonwoven fibrous fabric surface sheet of '544 an apertured formed film instead would be obvious to one of ordinary skill in the art in view of the interchangeability as taught by '698. In so doing the prior art combination necessarily and inevitably teaches a "liquid impermeable" surface sheet as claimed as best understood, i.e. a portion of the sheet between the aperture is liquid impermeable.

Claim 30: The absorbent product 10 includes a urine-disposing portion V extending from a center to a front section and a feces-disposing portion F extending from the center to a back section and the surface sheet 18 is provided only at the urine-disposing portion.

Claim 31: A liquid- impermeable back-flow preventing sheet 22, see Claim Language Interpretation section supra, is included inside and/or on the upper surface of the absorber 12, at least at the feces-disposing portion F, see Figure 3 of '544.

17. Claims 1 and 22-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mullane et al '246 in view of Dobrin et al '698.

Claim 1: See the Claim Language Interpretation section supra and '246 at the Figures and col. 2, lines 37-48, col. 3, lines 67-col. 4, line 17 and col. 4, line 28-col. 12, last line, i.e. '246 teaches an absorbent product 10 with a liquid-impermeable surface sheet positioned on the upper side, e.g., 12 or 40, see Claim Language Interpretations section supra, i.e. a portion of the sheet

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between the aperture is liquid impermeable, a liquid-impermeable back sheet positioned on the lower side, 14, and an absorber 26 to absorb discharged liquid positioned between the surface sheet and the back sheet. Claim 1 further requires a flow passage being provided to allow a part or all of the discharged liquid supplied to the surface sheet to move to a side of the back sheet of the absorber, see Claim Language Interpretation section supra and '246 teaches open areas between the surface sheet and back sheet such that liquid directly or indirectly moves to some side of the back sheet as claimed, e.g. passages through the absorber between the sheets. See col. 3, lines 57-59 of '246. Note also page 1, last full sentence of the instant application also. Therefore, '246 teaches all the claimed structure except super absorbent polymer contained in the absorber. However, see '246 at col. 4, lines 1-17, especially lines 3-7 and '698 at col. 4, line 41col 5, line 25, i.e. commonly used absorbent materials include super absorbent. Therefore to employ super absorbent polymer contained in the core of '246 would be obvious to one of ordinary skill in the art in view of the recognition that such is a commonly used absorbent material as taught by '698 and the desire of '246 to use such materials. In so doing the prior art combination necessarily and inevitably teaches an absorber as claimed.

With regard to claims 22-29, see Claim Language Interpretation section supra and discussion infra.

Claim 22: The absorbent product of claim 1 discussed supra has the capability of being removably received on the inner surface of a main body which can form an internal space to contain a region of the wearer, see "246 at col. 2, lines 43-45 and col. 13, lines 17-30, i.e. the undergarment necessarily and inevitably is a main body which can form an internal space to

contain a region of a wearer and the absorbent product is removeably received on an inner surface thereof.

Claim 23: The '246 product includes a guide sheet 12 and/or 36.

Claim 24: The '246 product includes a skin contact sheet 12.

Claim 25: '246 includes at least one product has some portion thereof which is a laminate, i.e. layers which are bonded or united together, see Figures and, e.g., col. 2, line 49-col. 3, line 56.

Claim 26: The '246 absorbent product has the capability of being removably received on an inner surface of a main body which can form an internal space to contain a region of the wearer, see discussion of claim 22 supra.

Claims 27-28: The product includes a guide sheet on the upper side of the surface sheet and a skin contact sheet on the upper side of the surface sheet or a guide sheet, see discussion of claims 23-24 supra.

Claim 29: The '246 product has at least one absorber in which some portion thereof is a laminate, i.e. layers which are bonded or united together, see discussion of claim 25 and col. 4, lines 8-10 of '246.

## Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited but not applied is incorporated by references which were applied and/or shows features which are disclosed and/or claimed.

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19. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Karin M. Reichle whose telephone number is (571) 272-4936.

The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Karin M. Reichle

Primary Examiner

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**KMR** 

September 24, 2007